

30. SOME INTERESTING PLANT RECORDS FOR RAJASTHAN

During botanical exploration of Banswara district, southern Rajasthan, I collected 16 species of angiosperms, belonging to 16 genera and 13 families, which have not been recorded from any locality in Rajasthan by earlier workers (Blatter & Hallberg 1918-21; Puri *et al.* 1964; Vyas 1967; Ramdeo 1969; Majumdar 1971; Singh 1974). Most of these species are common in Gujarat, Madhya Pradesh, Maharashtra and Gangetic plains. The species are enumerated below with their field numbers, short diagnostic features, affinities with other related taxa, flowering and fruiting time, habitat with exact locality of occurrence and frequency and abundance in the area.

The specimens are deposited in the herbarium of Botanical Survey of India, Jodhpur (BSJO) and Central National Herbarium, Howrah (CAL).

LEEACEAE

Leea edgeworthii Santapau (2929).

Annual herbs. Leaves unipinnate or lower ones bipinnate; leaflets with close parallel veins. Flowers greenish, in dichotomous cymes. Berries purple when ripe. *Fl. & Fr.*: August-October.

Common in shady localities in the forests; abundant in Puna pathar forest block (Alt. 950 ft.). Mature berries are eaten by the local people.

PAPILIONACEAE

Clitoria biflora Dalz. (2972).

Erect, annual herbs. Leaves pinnate; leaflets 5. Flowers blue-violet, axillary, solitary or rarely geminate, deflexed. Pods flat, 3-4.5 cm. long, deflexed. *Fl. & Fr.*: August-October.

Common under bushes and shrubs in the

forests, particularly in Anand Sagar forest block (Alt. 575 ft.).

Desmodium spirale (Sw.) DC. (3676).

Erect, annual herbs. Leaves 3-foliolate. Pods flat, indented very deeply on both the sutures; segments rhomboid, with strongly involute and revolute margins thus giving the pods a spirally twisted appearance. *Fl. & Fr.*: August-October.

Common in shady localities on the hills, particularly in Hura Bowji forest block (700 ft.) in association with *D. dichotomum* (Willd.) DC. which it also resembles in vegetative stage. Recently, Maheshwari & Sharma (1969) reported *D. neomexicanum* A. Gray, a native of America, from Ajmer and Mt. Abu. It differs from *D. spirale* (Sw.) DC. only in that the margins of pod-segments are sinuate, not spirally twisted.

Galactia villosa Wt. & Arn. (2974).

Herbaceous or semi-woody climbers. Leaflets 3, eglandular. Nodes of racemes tumid. Stamens didynamous (9+1). Style beardless. *Fl. & Fr.*: July-September.

Common among bushes and shrubs in Anand Sagar forest block (Alt. c. 180 m). It is sometimes confused with *Teramnus labialis* Spreng.

RUBIACEAE

Knoxia sumatrensis (Retz.) DC. (2983).

Annual herbs, upto 60 cm. high. Leaves elliptic to ovate-lanceolate. Stipules bristly, often connate into a sheath. Flowers violet-purple, 4-merous, sub-spicate on the branches of corymbose cymes. Cocco 1-seeded. *Fl. & Fr.*: August-October.

Common among grasses in wastelands near Forest rest house, Danpur (Alt. c. 300 m.).

ASCLEPIADACEAE

Holostemma annulare (Roxb.) Schum. (3082).

Annual climbers. Leaves ovate-cordate. Flowers white, in axillary cymes. Anthers with membranous appendages and one pendulous pollen mass in each cell. *Fl. & Fr.*: August-October.

Rare; A climber on trees in Shergarh forest block (Alt. c. 280 m.). It resembles closely species of *Mardenia* R. Br. and *Dragea* Meyer. **Tylophora hirsuta** (Wall.) Wight (2927).

Twiners, with hirsute stem, penduncles, pedicels and calyx. Leaves ovate or ovate-lanceolate, almost glabrous. Flowers pale-green, in distant, few-flowered, umbellate cymes. Coronal lobes wholly adnate to the staminal column. Follicles paired, glabrous. *Fl. & Fr.*: August-October.

It is a Himalayan element; common on the hills in Puna Pathar and Hura Bowji forest blocks (Alt. c. 300 m.). It is sometimes confused with *T. dalzellii* Hook. f. or *T. mollissima* Wight.

LOGANIACEAE

Cynoctonum mitreola (L.) Britt. (3675).

Erect, annual herbs. Leaves ovate, acute. Stipules broadly deltoid, often connate and reduced into a transverse ridge. Flowers white, unilateral in dichotomous cymes. Bracts and bracteoles linear, persistent. Capsules wedge-shaped, 2-horned; horns incurved. Seeds ellipsoid, 3-gonous, with a ventral cavity. *Fl. & Fr.*: August-November.

Common in wet and shady localities in Puna Pathar forest block (Alt. 700 ft.). It resembles closely species of *Ophiorrhiza* L. (Rubiaceae).

GENTIANACEAE

Canscora decussata Roem. & Schult. (3690).

Erect, annual herbs. Leaves 3-nerved. Stem, pedicels and calyx distinctly winged. Flowers white. Capsules membranous. *Fl. & Fr.*: August-October.

Common in wet and shady localities in Wadita village forest block (Alt. 650 ft.).

ACANTHACEAE

Neuracanthus sphaerostachyus (Nees) Dalz. (3010).

Erect, semi-woody herbs. Flowers violet-purple, in dense, spherical or globular, axillary, bracteate spikes. *Fl. & Fr.*: August-October.

This species is apparently endemic in Western Peninsula. Present collections from shady localities on the steep slopes and foot of hills in Loharia forest block (Alt. 500 ft.) extend its distribution further northwards. The number of viable seeds per plant is few. Dalzell (1850) and Santapau (1951) have given contradictory remarks in this regard.

LABIATAE

Leucas zeylanica R. Br. (3067).

Erect, annual, hispid herbs. Leaves linear, less than 1.5 cm. broad. Calyx-mouth oblique, produced above, villous within. Nutlets obovoid-oblong, sharply angular on the inner face. *Fl. & Fr.*: August-October.

Common weed of cultivated fields in the western part of the district, particularly near Shergarh village (Alt. c. 250 m.).

AMARANTHACEAE

Amaranthus caudatus Linn. (3020).

Annual, glabrous herbs. Leaves obtuse. Bracts straight, not much exceeding the obovate, mucronate sepals. *Fl. & Fr.*: August-October.

Occasional; found in humus rich fertile soils near habitations (Banswara; Alt. c. 300 m.).

ZINGIBERACEAE

Curcuma pseudomontana Grah. (2860).

Tubers elliptic or globose, yellow inside, borne at the end of root-fibres. Corolla yellow, covered within greenish bracts tinged with red or purple. The position of the spike in relation to the leaves is at first lateral. Later on, in the rainy season, this lateral spike decays and gives way to a central one. Most of the flowers are infested by some insects (*see* Santapau 1945, 1952; Chavan & Oza, 1966). *Fl. & Fr.*: July-October.

Common in the forests; abundant on Dagia Bowji hill near Ghatol (Alt. c. 210 m.).

DIOSCOREACEAE

Dioscorea hispida Dennst. var. **daemona** (Roxb.) Prain & Burk. (3083).

Extensive woody climbers, often bearing bulbils on the nodes. Leaves 3-foliolate. Male flowers closely packed. Fertile anthers 6. Seeds winged on one side only. *Fl. & Fr.*: August-November.

Rare; found in the dense forests of Shergarh block (Alt. c. 280 m.). Roxburgh (1832) says that the tuberous roots are dreadfully nauseous, even after being boiled.

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CYPERACEAE

Cyperus meeboldii Kuk. (3034).

An erect sedge, upto 25 cm. high, with a small pseudo-bulbous base. Spikelets elliptic, $4.6 \times 1.5-2.5$ mm., condensed in solitary, terminal heads about 1 cm. in diameter, subtended by 3, unequal, leafy bracts. Glumes boat-shaped, mucronate, 5-nerved, 2 mm. long. Anther one. Style slender, without stigmatic lobes. Achenes 3-gonous, turbinate, about 0.5 mm long.

Common in open wastelands near Forest Nursery, Kushalgarh (Alt. c. 280 m.), in association with *C. triceps* (Rottb.) Endl. This is a peninsular species reported so far from Badami (Mysore) in India (*see* Fedde Report. 18: 347, 1922). Hooper and Napper (1972) also mentioned its occurrence in Peninsular India. The recent collections also from Kailana (Moorthy 83 BSJO), Mandor (Tiwari 615b BSJO) and Sardarpura, Pali (Shetty 1843 BSJO) extend its distribution further northwards.

GRAMINEAE

Panicum psilopodium Trin. var. **psilopodium** (3086).

Annual, glabrous grass. Panicles effuse. Spikelets ovate-oblong to elliptic, 2-3 mm. long, symmetrical, not gaping. *Fl. & Fr.*: August-September.

Common near water in Shergarh forest block (Alt. c. 280 m.). Variety *coloratum* Hook. f. occurs on Mt. Abu (Bor 1960).

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31. SOME NEW PLANT RECORDS OF NAGPUR REGION

The present paper, records four new plants from Navegaon, about 135 Km., east of Nagpur in Bhandara District. These are:

COMBRETACEAE

Combretum ovalifolium, Roxb. Hort. Beng. 1814. Fl. Ind. ii 256. *C. heyneanum*, Wall. Cat. 4001. *C. roxburghii* and *C. albidum*, G. Don.

A large scandent shrub; leaves opposite ovate; racemes lateral and terminal; flowers sessile; fruit pale golden brown with four papery finely transversely striate wings. Flowers—Nov.-Dec. Fruiting—Jan.-Feb. Common plant. *Munshi* 1.

APOCYNACEAE

Ellertonia rheedii, Wight, Incon. 1850. t. 1295. F.B.I. iii 641.

Climbing glabrous shrub, branches twinning, slender; leaves opposite, elliptic-oblong, acuminate, glabrous; flowers in di-or trichotomously branched cymes; bracts small, acute, persistent; follicles 5-15 cm. long, cylindric, divaricate, slightly recurved. Flowers—Nov-Jan. Fruiting—Jan-March. Common. *Munshi* 2.

LABIATAE

Dysophylla cruciata, Benth. in Wall. Pl. As. Rar. Vol. I. 1830. Cat. 1541. *D. tetraphylla*, Wight Ic. t. 1444. *Mentha quadrifolia*, Don Prodr. 113.

Hirsute, stem simple, erect; leaves four in a whorl, sessile, linear, margins revolute quite entire; spikes single, dense; flowers pale purple; calyx villous; corolla tube entire or sparingly glabrous.